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FOURTEENTH YEAR. VOL. XIII, NO. 7

Small Profits and Quick Sales,
and One Price to all, is the Mot-
to of our Business. * * * * *

THE
"BEE HIVE"

SENDS

CHRISTMAS
GREETINGS

To its thousands of friends and
customers, and specially invites
them to visit us during the
next two weeks and inspect
our mammoth display of

HOLIDAY GOODS.

Never were goods so pretty;
never were they so novel, and
never were they so remarkably
low in price as they are this
season. We have presents suit-
able for every condition in life,
whether Prince or peasant,—
something that would gladden
the hearts of anyone. For what
would Christmas be without
giving a present to your nearest
and best friends. It is impossi-
ble in this small space to enum-
erate one-fifth of the thousand
and one things we have on sale.

Respectfully,

Strange & Summersby.

IRRIGATION IN KANSAS!

A VAST EMPIRE AWAITING SCIENTIFIC CULTIVATION.

What Ditches Have Demonstrated at
Dodge City.—What Gilbert Bros.
Have Accomplished.

The Water Bearing Sands of the Ar-
kansas Solve the Irrigation
Problem.

Irrigation as an Investment.

Kansas City Times.

Inquiry into the investment possi-
bilities of irrigation is at this time particu-
larly pertinent in view of the fact that
the question of irrigation a large portion
of our arid land is attracting the atten-
tion of all classes of people and has so
forced itself into prominence that even
congress has been obliged to send out a
commissioner to ascertain what portion
of the west can be irrigated, to recom-
mend the best mode and help its success-
ful accomplishment by providing a por-
tion of the ways and means. It is proba-
ble that the government can do no more
than to survey the entire region, and
perhaps build storage reservoirs at cer-
tain available points in the Rocky moun-
tain range and thus to husband a portion
of the water now going to waste.

The rapid accumulation of capital, the
low rate of interest obtainable upon
bonds and mortgages, the feeling of in-
security which investors have in regard
to railroad stocks and bonds also help to
draw attention to the question of irri-
gation as an investment for capital wherein
it may safely and certainly yield a larger
return than ordinary mortgages, munici-
pal bonds or the best class of railroad
bonds.

The question of irrigation as an invest-
ment assumes great prominence from
the fact that almost all of the public do-
main within the belt of what is denomi-
nated certain rainfall has been taken by
actual settlers or is in the hands of those
who are holding it at figures far in ad-
vance of the government price. This be-
ing true, those who hope to found homes
in the west upon cheap lands are forced
to consider the advisability and desirability
of locating upon lands in the tree-
less sections of our country, where the
rainfall is scant, uncertain and not copious
enough for successful plant growing. Of
this land there remains uncultivated the
enormous amount of about 600,000,000
acres, and Major Powell, a conservative
geologist and explorer, considers the
one-fifth, or 120,000,000 acres, of this has
such topographical position that it can
be successfully irrigated from actually
determined and well known water supply.

As to quantity, this is an area larger
than France, which supports nearly 40,000,000
people, and as to quality this land has
no superior anywhere in productiveness.
This last fact has been fully demonstrated
in localities in every state and territory that
contains what is known as arid lands. Southern
California, the valley of the desert in Utah,
the valleys of the Platte in Colorado and the
Arkansas in southwestern Kansas, all are
open books wherein all men may read
that wherever irrigation has been tried
the soil yields in luxurious profusion and
unapproachable variety.

So far but a small fraction of the land
that can be reclaimed by irrigation has
been transformed into farms, but in
every locality, without exception, where
land has been thoroughly irrigated it
has risen in value until a well watered
farm in any of the states or territories
named is worth and readily brings from
\$25 to \$100 per acre. The reason for this
lies in the fact that every acre of
land properly irrigated brings a sure
crop and returns to the husbandman more
than twice the yield of an acre of the
best land of any state that is not irrigated.
The only really sure agriculture in the
world is that which can depend upon a
water supply controlled by man, and
then all that follows as its desirability or
profitableness is established. From these
premises we come to the certain conclusion
that these lands will be in demand
for homes just as soon as it is certain
that they will have a supply of water;
and having water that they rise in value
from nothing to the price of good lands
in the older states at almost a jump, the
conclusion is reached that the capital
which supplies to the thirsty ground its
moisture must and will have abundant
reward. It is the only tax in the wide,
wide world which will always be cheerfully
paid.

In the history of irrigation in the west
the canals or ditches that have been con-
structed have been profitable to the in-
vestors, though as yet we have been only
in the experimental stage, gathering ex-
perience and data useful to the fortune
delvers in this direction. Conclusions
based upon past experience in this
country are that wherever there is a water
supply of sufficient magnitude to irri-
gate a body of several thousand acres
that water becomes at once valuable and
is eagerly sought for by farmers who

wish to till those acres. In a majority
of cases this water can be distributed by
open canals, which can be built compar-
atively cheap and be inexpensively main-
tained. As an investment such building
must be first class and provide a perma-
nent, safe and reliable income. Unlike
railroad bonds and stocks, there are no
great running expenses, no appreciable
wear and tear, no rust, no renewals and,
better yet, no constant construction ac-
count and no disastrous competition,
compelling cutting of rates and irregu-
larity of income.

The only disputable point is the one of
constant, certain water supply. Where,
as in the case of the Bear lake and river
irrigation company, who are building the
longest canal yet attempted in this coun-
try, the supply comes from a mountain
lake and streams whose waters have al-
ways been constant and abundant, there
would seem to be no doubt of the desir-
ability of the enterprise as an invest-
ment; and where, as seems to be now
fully demonstrated, the water supply can
be taken from the underflow of such
great rivers as the Arkansas, the same
conclusion must be drawn. A recent
number of the *Financier*, an able and
conservative financial journal of New
York, in speaking upon this same sub-
ject says:

The capitalists of this country have not
yet become conscious of the hundreds
upon hundreds of millions to be obtain-
ed in dividends, upon, probably, next to
the government itself, the most solid and
secure form of investment ever offered a
community; that of furnishing a water
supply for irrigating and other purposes
in the states of our great west. Probably
the highest paying dividend stock in the
world is that of a London corporation
which hundreds of years ago was
granted the privilege of furnishing Lon-
don with part of its water supply. A
share of this stock was recently put on
the market in settlement of an estate and
the amount of money it sold for was
about half a million. The greatest
amount of money in any one industry
that has occupied the attention of En-
glishmen during the past fifteen years
has been devoted to this purpose in In-
dia. In amount these investments are
hundreds of millions and for security no
better has been offered in the London
market. In the Cape Colonies, South
Africa, the same work is being carried
on to a proportionate extent, and the ex-
perience of those employed is, no surer
form of profit, with no risk whatever so
far as has yet been discovered, has ever
been offered the investing public.

One of these highly capitalized com-
panies in India obtains a government
concession through an uninhabitable,
torrid region, and builds a waterway from
some source of supply that with its later-
al arms extends thousands of miles
through a territory which, because of the
water thus furnished, quickly becomes a
perfect garden, growing every kind of
produce belonging to that climate.

These waterways are constructed in a
thoroughly English manner—of solid
masonry throughout—so no absorption
into the earth during the passage of the
water is possible.

When one of these waterways is finish-
ed the stockholders have nothing further
to do than receive enormous dividends
that flow in upon them like water.

The region in India where these water-
ways are constructed have an almost tor-
rid climate and the natural or usual rain-
fall is only about nine inches per annum,
while on our plains the climate is tem-
perate and the average rainfall is some-
thing like twenty-five inches, nearly five
sixths of which falls between April 1 and
September 1. Therefore the loss of
water by evaporation is not nearly as
large as in India, the soil does not re-
quire as frequent wetting or as much at
a time and the cost of work necessary to
our climate are but a tithe of what they
are in India. If they pay so enormously
in India, what will they not do in this
country, where even the elements and
the climate are in our favor?

The *Financier* continues:
Outsiders little realize the profits of
one of these waterways that makes a
garden out of a desert.

The dividends that are paid are very
great, for the waterways once made, be-
yond the interest upon the invested cap-
ital, it is pretty much all profit.

Millions of prosperous farms have been
made fertile and profitable to their
owners within the past few years in
this manner; in fact the farms had no
previous existence, the land having been
considered useless and unprofitable. When
land is worthless because of droughts,
and you supply that land with an abun-
dant of water, it takes no mathematician
to convince you of the probable re-
turns you can reap by doing such a ben-
efit.

And anyone immediately sees you en-
hance the contiguous property from a
figure of little or no value to as many
fold as the produce yields a reasonable
percentage upon. Farmers all over the
world agree that water fed to their farms
when needed by means of irrigating
canals yields far greater average returns
than rainfalls upon the same land, even
where a rainfall may reasonably be de-
pendent upon.

The *Financier* in its whole article has
told no greater truth than is contained in
the last paragraph. The farmer of even
Ohio and New York could well afford to
and would willingly pay \$1 an acre per
year for certain water at critical times in
the ripening of crops, and they could
well afford to pay another dollar a year
for the delightful climate and clear skies
of Utah, Colorado and western Kansas
wherein to gather and cure their hus-
bandry. Seldom, if ever, will any por-
tion of a crop be lost in the irrigable
portion of the west by storms coming at
inopportune times.

Again the *Financier* says:

It is unnecessary to enumerate all the
sources of water supply that would feed
such systems properly laid out, for they
have always been described and to an
active observer are readily appreciated
when on the ground. If there is any one
section more than another adapted to
profitable investment in this direction, in
our opinion it covers those lands ad-
jacent to the Union Pacific railroad, its
feeders and connections. Along the
eight or more thousand miles of this
system are numberless sources from
which an inexhaustible supply of water
may be obtained, sufficient to irrigate
millions upon millions of acres, provided
there is no waste in transit. Still another
inducement to give particular attention
to this district that covers the heart of
the great west is the generous treatment
of this road's management of all settlers
along its lines.

San Gabriel valley, California, in the
midst of which Los Angeles is situated,
as well as nearly all those thriving towns
so celebrated for fruit and produce, is
entirely dependent upon irrigation, for
no rain falls in that vicinity during the
entire summer of six months. But their
ditches are of the rudest description,
and, with their limited resources of in-
creasing the water supply, Governor
Swift of that state recently said in pub-
lic: "It is an open question whether
the water supply is sufficient to permit
any increase of inhabitants in the state.
California is greatly limited in this re-
spect unless new water resources are de-
veloped in addition to those already
known. However this may be, the fact
remains that those using the irrigation
system in the San Gabriel valley say
that its advantages over expectant rain-
falls even in the best portions of the east
are so great that a comparison between
the two methods is not to be considered.
Now they control their crops to a nicety
and produce results such as regularity
can alone give."

The *Times* knows that all this is true
and is further cognizant of the fact that
the soil of western Kansas, much of Col-
orado and of Utah is almost incompar-
ably better than that of California. The
market for products is nearer and greater
and the transportation shorter.

What the *Financier* says of the policy
of the Union Pacific will undoubtedly
hold good for the Rock Island, the Santa
Fe and the other railway systems that
penetrate the great plains. It is a mat-
ter of self-interest and this question of
irrigation concerns all those great lines
of railway which comes to our city as
the metropolis of the southwest. Irriga-
tion would be a blessing to mankind,
because when these now arid wastes bloss-
om with thriving villages, cities, homes,
farms, schools and churches they will be
the abiding place of a people of intelli-
gence and thrift and furnish to the peo-
ple of the world a very considerable por-
tion of all the fruits, grain and roots
which bear cultivation in the temperate
zone.

Special Correspondence Kansas City Times.
DODGE CITY, KAN., NOV. 21.—The sub-
ject of the arid lands of the United States
is one of prime importance now and not
to be overlooked, because on what is now
practically valueless soil is to settle in the
not remote future at least as many peo-
ple as there are in all the states east of
the Mississippi river. The total arid
lands are in round numbers 600,000,000
acres, about one-fifth of which can and
will be irrigated within the next ten
years. This immense body of land, once
irrigated and tilled, will become a more
thickly settled farming community than
Iowa or Illinois, as the universal expe-
rience is that under irrigation a man tills
fewer acres than under natural rainfall,
while it is also a fact that the climate of
this region is remarkably healthful, put-
ting new life and vigor into those who
enjoy its bracing air and bright, clear
skies.

By far the largest available area of this
waste lies in western Nebraska, western
Kansas and eastern Colorado. Taken in
its entirety the best land of the arid re-
gion lies in Kansas and Nebraska, and
for reasons which will be stated farther
on it has the best immediate prospect of
irrigation.

Thirty years ago it was held by scien-
tists and common citizens that it was
utterly impossible to raise a crop
west of the 100th meridian; that all land
west of that and east of the Rocky moun-
tains must be pastoral. Immense herds
of buffalo fed upon these plains, adding
very little wealth to the nation. Seizing
upon the idea of converting this almost
limitless expanse into pasturage adven-
turous herdsmen began to raise cattle on

the plains, and the growth of the nation
immediately after the war, with the de-
mand for beef east and in Europe, made
the business for a term of nine years ex-
ceedingly profitable; yet the business of
ranching enriched but a few; it did not
build up popular communities with di-
versity of interests; it did not dot the
plains with houses, schools, churches or
towns. The risks of the business were
great, but as long as the profits were
large they were eagerly taken. The busi-
ness, too, was cruel. Stock had no shel-
ter, no food except the dry grasses of the
plains, and often starved or miserably
perished of thirst and cold in the winter
months. Gradually the settler forced his
way westward into the land of the ranch,
contracting the area of cheap pasturage.
The supply began to exceed the demand
for beef and what had been for a time
a phenomenally profitable business be-
came unprofitable.

When the Indian territory shall have
been opened to settlement, the day of the
"ranch" will be past and gone; but in its
place are to come happy homes for the
masses and prosperity for great commu-
nities.

The natural grasses of the plains, or
those that are most succulent, grow in
bunches and patches; they do not make
sod like the blue grass or red top; and in
ranching it probably took fifteen acres to
support one bullock. The government
experimental farm, near Garden City,
was started especially to experiment
with grasses in the hope that some vari-
ety would be discovered adapted to the
dry soil of the plains and which would
be succulent and form a sod. A French
grass now being grown on the farm so
far seems to be the variety that will suit
the existing conditions. The great plants
must, however, have water artificially fed
to the soil in order to develop their great
value to the nation and world; and so
far as hundreds of thousands of acres of
arid land in Kansas are concerned, oper-
ations now being conducted near here
would seem to solve the problem.

That there was an immense area of
water-bearing sand in the valley of and
contiguous to the Arkansas has long
been known, but no individual or com-
pany seemed to have the courage to tap
it, bring it to the surface and distribute
it to the parched soil. Recently the Gil-
bert Bros. of Dodge City, who have built
some hundreds of miles of canal to take
the overflow of the Arkansas, concluded
to build a new line of canal, at the head
of which they would construct or rather
dig a reservoir, the supply for which
would come from the water-bearing sand
in the valley of the river.

To resolve was, with them, to act, and
they commenced late in the summer a
canal thirty-five miles long, with a reser-
voir at its head 4,000 feet long, with an
average width of fifty feet and a depth
below the bed of the river of six feet.
This reservoir developed the fact that the
water is there in great quantity and bor-
ings and wells at different points from
Kinsley west to Garden City and even
beyond prove that this water bearing
sand is hundreds of feet in depth with a
width well up in the tens of miles. Long
shallow reservoirs which receive the
water from the bottom, present no en-
gineering difficulties that are at all ex-
pensive or formidable; and as the aver-
age fall of the Arkansas is seven feet to
the mile, it will readily be seen that the
water can be conveyed to the uplands by
comparatively short and inexpensive
canals. The vastness of this deposit of
water, so to speak, dismissed from the
mind all danger of draining the supply;
and, when, as it seems to me must be the
case, every farmer will have a windmill
or other pump, and will store more or
less water for use at critical times and
the government supplements present
supply by immense reservoirs in the
mountains, there is going to be water
enough available to make a farm out of
almost every forty in southwestern Kan-
sas.

I am assured by scientific men who
have made the water supply a special
study that a somewhat similar condition
of affairs exists in the valleys of the Re-
publican and Platte. If this be true then
the tillable area will immediately enlarge
to vast proportions and this now almost
barren waste will soon cut a large figure
in the economy of this nation and the
world.

In a subsequent letter I shall present
the opinion of government engineers and
members of the geological survey, all of
whom I find are quite as hopeful and
sanguine of the future destiny of this re-
gion as myself.

It almost seems childish to reassert the
fruitfulness or profitableness of irrigable
lands. The Mormons have taught man-
kind what can be accomplished in this
direction east of the Rockies, while the
San Gabriel valley in California attests
the marvels which can be wrought in a
few years upon land once growing sage
brush and cactus. As there is nothing
in the climate to discredit the perfect
maturing of all crops, even maize, our
now arid lands once watered will become
the granary of this country.

It would be rank folly to deny that
southwestern Kansas is in a business
way depressed and that the section has

lost a large percentage of its population
during the past twelve months. The
boom of three years ago was followed
by two years of poor crops, forcing val-
ues of real estate away down and dispir-
iting even those who three years ago saw
in this region their Utopia. The fact is
the boom was unwise and based on noth-
ing really substantial. Just why this re-
gion should all at once fill up with peo-
ple who looked for large and certain
crops where it had been universally con-
ceded the rainfall was too slight to be
depended upon to furnish moisture suffi-
cient to certainly mature them surpasses
my comprehension. The people went wild
all at once and land rose at a bound from
government value to ten and twenty dol-
lars per acre, most of it before a plow
had turned a furrow of the virgin soil.
By some unknown process of reasoning
men convinced themselves that the cli-
mate had all at once changed in their
favor and nature had become so kindly
that water from the clouds would be
plentiful to moisten the parched earth,
germinate and ripen the grain.

Nature refuses to act thus kindly and
for two years has failed to supply the
necessary rainfall. The inhabitants
themselves, in true pioneer fashion, just
scratched the earth, never turning fur-
rows deep enough to give the best results.
Where it is not possible to artificial-
ly water the soil in southwestern Kansas,
it is absolutely essential that the ground
be plowed ten or twelve inches deep and
then be often worked while the crop is
growing. The farmer in charge of the
government experimental farm, just
west of this place, assures me from his
experience that most kind of crops suit-
able to this climate would be nearly cer-
tain, year in and year out, provided that
deep plowing was employed, and the
soil often worked during the season of
growth. The average rainfall in this im-
mediate section is about twenty-one
inches per annum, nearly five-sixths of
which falls between April 1 and Septem-
ber 1. The soil is wonderfully produc-
tive when moistened and in ability to
raise a great diversification of crops, this
region has no superior. Successful farm-
ing here means hard work intelligently
done and the man who comes to south-
western Kansas to farm, thinking he can
grow rich and take it easy, is very much
mistaken and had better remain away.

It is unfortunate for this section, that
just about eight of every ten who first
settled here, were a hopeful, sanguine
set of "ne'er-do-wells," who came to
get a homestead, brought very little, if
any, money with them, and had none of
the resolute purpose of the early pio-
neers of our land. When they got their
homestead they expected their fortune
was made and preferred to sit around in
town, swap lies and talk politics, to rust-
ling with the hoe in their fields. They
put in but little crop and it failed; their
ambition all oozed out and they deserted
the state, crying wolf as they went.

Another class came to get the home-
stead, intending to mortgage or sell at
the first opportunity and then skip out.
Hundreds did this very thing. These
people are the nomads of our plains.
They are restless, and every last one op-
timists just as long as the poles of their
prairie schooners are pointed westward.
They are always bound for some new re-
gion and are always going to get a quar-
ter section on which a town will spring
up or which will be underlaid with coal,
salt or gold from the proceeds of which
they are certain to get their everlasting
fortune. These people carry their entire
possessions in their rickety wagons, and
their principal property consists of five
or six sunburned children, a patient, but
spiritless wife, who is quite ready to vote
marriage a failure, and a pair of spavin-
ed, scrawny horses or disreputable look-
ing mules. In my time I have talked
with hundreds of these people and have
found they are never contented except
when upon the move. If they pre-empted
a farm in the New Jerusalem, they
would be quite ready to leave it in six
months or a year, to search for a better
locality.

The land in the Arkansas valley is, as I
said, exceedingly fertile when watered.
It is the best soil for root and vine crops
I ever saw and I have made personal ex-
amination in nearly every state and ter-
ritory. Corn does well here, the aver-
age yield being from sixty to seventy-
five bushels to the acre. Beets grow to
twenty and even thirty pounds in weight.
Squashes and pumpkins grow so large
—I am almost tempted not to say it for
fear of being accused of exaggeration—
but fifty, sixty and seventy pounds are
common weights, and one squash was
shown at a fair that turned the scales at
182 pounds. Watermelons were plen-
tiful this year that weighed sixty and sev-
enty pounds. Alfalfa grows three crops
a year, producing about six tons to the
acre. Just now this is perhaps the most
valuable and best paying crop known to
the region. Sweet potatoes literally
cover the ground when turned out of the
rows and have been a drug on the mar-
ket at 25 cents per bushel.

If I farmed in this section I should cer-
tainly greatly diversify, and among other
things should raise broom corn. I never

[CONTINUED ON 4TH PAGE.]